Table 1. Time and Temperature Relationship to Serious Burns		
Water Temperature		*Time Required for a 3rd Degree Burn to Occur*
155°F	*68°C*	*1 sec*
148°F	*64°C*	*2 sec*
140°F	*60°C*	*5 sec*
133°F	*56°C*	*15 sec*
127°F	*52°C*	*1 min*
124°F	*51°C*	*3 min*
120°F	*48°C*	*5 min*
100°F	*37°C*	*Safe Temperatures for Bathing (see Note)*

Note: *Burns can occur even at water temperatures below those identified in the table, depending on an individual's condition and the length of exposure.*

Based upon the time of the exposure and the temperature of the water, the severity of the harm to the skin is identified by the degree of burn, as follows.[10]

- *First-degree burns involve the top layer of skin (e.g., minor sunburn). These may present as red and painful to touch, and the skin will show mild swelling.*

- *Second-degree burns involve the first two layers of skin. These may present as deep reddening of the skin, pain, blisters, glossy appearance from leaking fluid, and possible loss of some skin.*

- *Third-degree burns penetrate the entire thickness of the skin and permanently destroy tissue. These present as loss of skin layers, often painless (pain may be caused by patches of first- and second-degree burns surrounding third-degree burns), and dry, leathery skin. Skin may appear charred or have patches that appear white, brown, or black.*